

Summary
Conference Call
National Earthquake Prediction Evaluation Council (NEPEC)
1:30-2:30 pm, October 25, 2006

On the call:

Council Members

Dr. Jim Dieterich, University of California, Riverside (Chair)
Dr. Dave Applegate, USGS Reston (Co-chair)
Dr. Goran Ekstrom, Columbia University
Dr. David Jackson, University of California, Los Angeles
Dr. Bruce Shaw, Columbia University
Dr. Jeroen Tromp, Caltech
Dr. Mary Lou Zoback, USGS Menlo Park

Staff:

Dr. Michael Blanpied, USGS, Reston (Executive Secretary)

Summary:

Recap of Riverside meeting

NEPEC Chair Jim Dieterich began by summarizing a few conclusions from the October 16-17 NEPEC meeting and pointing out the action items for Council members called out in the draft meeting summary circulated earlier. The remainder of the conference call dealt with the following two topics.

NEPEC Membership

An action item from the Riverside meeting was for Council members to provide the USGS their views on needed areas of expertise and regional representation given the departure of Weldon and Council focus. Zoback and others voiced a need to replace Weldon's expertise in paleoseismology and the Pacific Northwest. Several names were raised and discussed. Applegate and Blanpied will attempt to have one—or possibly two—new members seated (or at least identified and present) at the upcoming Seattle meeting (date and venue TBD).

Review of the WGCEP process and products

Following on discussions begun at the Riverside meeting, the conference call participants discussed options for the Council's role in the process and earthquake rupture forecasts to be delivered by the Working Group on California Earthquake Probabilities (WGCEP). The Building Seismic Safety Committee (BSSC) has asked the USGS to provide draft national seismic hazard map updates by February 15, several months earlier than the early summer date previously assumed. The WGCEP is currently working under the assumption that its report is due to the Scientific Review Panel (SRP) in draft form by January 2 and to the National Seismic Hazard Mapping Project in reviewed and completed form by January 31.

Participants discussed the following topics:

- Does the USGS request a NEPEC review of the WGCEP rupture forecasts?

Blanpied stated that the USGS would like some form of NEPEC review of the WGCEP's time-independent rupture forecast, and input from the Council on what form of review would be best.

- What is the nature and firmness of the BSSC deadline? Should the NEPEC aid the USGS in attempting to alter the deadline to allow more time for the WGCEP time-independent rupture forecast to be completed, documented and reviewed?

Blanpied lacked full details about the new deadline and whether it could be influenced. Dieterich proposed that two tactics be pursued in parallel: First, the NEPEC would learn more about the BSSC deadline and try to alter it if asked to do so; influence would come in the form of a letter from Dieterich to the USGS Director, written with the assistance of Applegate and Blanpied. This letter would insist that a proper review of the WGCEP report must leave open the possibility that major changes be required, and that those changes might not be done in time to meet the current deadlines. Second, the NEPEC would involve itself in the review of the WGCEP report under the assumption that the BSSC deadline was firm.

Applegate promised the Council an explanation of the code-making process as well as the current WGCEP schedule for the coming ten months.

[A subsequent communiqué from E.V. Leyendecker, USGS Emeritus, clarified that the BSSC schedule was unlikely to be influenced. The BSSC will use whichever seismic hazard maps are available in February, although some changes will be tolerated between those draft maps and the "final-final" maps due in September. Given the importance the USGS places on having its maps form the basis for seismic provisions in future building codes, it is imperative that the deadline be met.]

- What is the best role for the NEPEC given the deadlines and the existence of the WGCEP's Scientific Review Panel (SRP)? What schedule of events will achieve these aims?

Dieterich expressed concerns that the NEPEC review not duplicate the efforts of the SRP, and that time was short for the NEPEC to participate meaningfully in the review process. Zoback proposed that the Council's role be "review monitors" rather than in-depth reviewers. In that role the Council could oversee the review process, ensure that the best independent reviewers were selected, and review the reviewers' report. Call participants voiced support for this level of Council involvement.

The WGCEP's Executive Committee (ExCom), Management Oversight Committee (MOC) and SRP have scheduled a meeting for Wednesday, January 17 in Menlo Park. At that meeting the ExCom will present summaries of key points from their January 2 draft report, field questions from the SRP, and hear concerns from SRP reviewers. It was suggested by Dieterich that a subcommittee of the NEPEC attend that meeting as observers, with subcommittee membership to include SRP members Ellsworth and Jackson plus other Council members to be determined; and that the full Council meet on

or about January 23 to receive a report from the subcommittee and prepare a report to the USGS. Participants agreed with this plan.

Applegate pointed out that the Council could decide to alter this course of action after it receives the January 2 draft from the WGCEP.

- What shall be the NEPEC role in reviewing the later, time-dependent earthquake rupture forecast that the WGCEP plans to deliver to the California Earthquake Authority (CEA) in September?

Dieterich described the review process for earlier Working Group reports. For the 1988 and 1990 rupture forecasts, the NEPEC played a role similar to that of the current SRP, with close contact between the Council and the Working Group throughout the WG's process of formulating models, selecting data, analyzing results, and writing the report. He suggested that the current NEPEC allow the SRP to continue to play that role through the coming months, but that the NEPEC members have sufficient involvement that they are able to offer a reasonably detailed and strong endorsement of the time-dependent forecast and its report.